

WHAT IS CLAIMED IS:

1. A reflective liquid crystal display device comprising:

5 a plurality of gate lines and data lines intersecting on a first substrate, the gate line and the data line defining pixel areas;

Sub A4  
a thin film transistor formed at the intersection of the gate line and the data line, the thin film transistor including a gate electrode, a semiconductor layer, a source electrode and a drain electrode;

a capacitor lower electrode of a storage capacitor formed on the same plane as the gate line;

a capacitor upper electrode formed integrally with the drain electrode on the capacitor lower electrode;

a first insulation film inserted between the capacitor upper electrode and the capacitor lower electrode; and

15 a thin film transistor array substrate connected with the drain electrode and including the reflective electrode formed at the pixel area.

2. The reflective liquid crystal display as claimed in claim 1, wherein the first insulation film is one of silicone nitride(SiNx) and silicone oxide(SiOx).

20

3. The reflective liquid crystal display as claimed in claim 1, further comprising a second insulation film between the capacitor upper electrode and the reflective electrode.

4. The reflective liquid crystal display as claimed in claim 3, wherein the second insulation film is one of silicone nitride ( $\text{SiN}_x$ ), BCB and acryl resin.

5 \ 5. A transflective liquid crystal display device, which has pixel areas defined into a reflection part and a transmission part, the liquid crystal display device comprising:

Sub A5 a plurality of gate lines and data lines intersecting on a first substrate, the gate line and the data line defining pixel areas;

a thin film transistor formed at the intersection of the gate line and the data line, the thin film transistor including a gate electrode, a semiconductor layer, a source electrode and a drain electrode;

a capacitor lower electrode of a storage capacitor formed on the same plane as the gate line;

15 a capacitor upper electrode formed integrally with the drain electrode on the capacitor lower electrode;

a first insulation film inserted between the capacitor upper electrode and the capacitor lower electrode;

a reflective electrode connected with the drain electrode and formed on the reflection area; and

20 a thin film transistor array substrate connected with the reflective electrode and including the transmissive electrode formed at the transmission area.

6. The transfective liquid crystal display device as claimed in claim 5, wherein the capacitor upper electrode extends along a boundary part between the reflective electrode and the transmissive electrode to prevent light leakage.

Sub 5 7. The transfective liquid crystal display device as claimed in claim 5, wherein the first insulation film is one of silicone nitride(SiNx) and silicone oxide(SiOx).

8. The transfective liquid crystal display device as claimed in claim 5, further comprising a second insulation film between the capacitor upper electrode and the reflective electrode.

Sub 9. The transfective liquid crystal display device as claimed in claim 8, wherein the second insulation film is one of silicone nitride (SiNx), BCB or acryl resin.

15 10. The transfective liquid crystal display device as claimed in claim 5, further comprising another first insulation film between the reflective electrode and the transmissive electrode.

20 11. A method for manufacturing a reflective liquid crystal display device, the method comprising:

intersecting a plurality of gate lines and data lines on a first substrate;

forming a thin film transistor on the intersection of the gate line and the data line, the thin film transistor including a gate electrode, a semiconductor layer, a source electrode and a

drain electrode;

forming a capacitor lower electrode of a storage capacitor on the same plane as the gate line;

forming an insulation film on the capacitor lower electrode;

5 forming an capacitor upper electrode on an upper portion of the capacitor lower electrode, the capacitor upper electrode being formed integrally with the drain electrode; and

forming a reflective electrode connected with the drain electrode.

10 12. A method for manufacturing a transfective liquid crystal display device, which has pixel areas defined into a reflection part and a transmission part, the method comprising:

intersecting a plurality of gate lines and data lines on a first substrate;

forming a thin film transistor on the intersection of the gate line and the data line, the thin film transistor including a gate electrode, a semiconductor layer, a source electrode and a

15 drain electrode;

forming a capacitor lower electrode of a storage capacitor on the same plane as the gate line;

forming an insulation film on the capacitor lower electrode;

20 forming a capacitor upper electrode on an upper portion of the capacitor lower electrode, the capacitor upper electrode being formed integrally with the drain electrode;

forming a reflective electrode connected with the drain electrode at the reflection area; and

PATENT  
8733.475.00

forming a transflective electrode connected with the reflective electrode at the transmission area.

[illegible]